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January 2, 2003

TO: Internal File

THRU: Priscilla Burton, Team Lead

FROM: Wayne Western, Environmental Scientist III

RE: Star Point Waste Fuel Mine Permit Application, Sunnyside Cogeneration Associates Inc., Star Point Waste Fuel Mine, PRO 007/042

SUMMARY:

Sunnyside Cogeneration Associates (SCA) acquired the Wattis Coal Refuse Pile that is located in Sage Brush Canyon. The refuse pile has accumulated from the disposal of coal mine waste from the Star Point Mine which is currently owned and being reclaimed by Cypress Plateau Mining Corporation (CPMC), a subsidiary of RAG American Coal Company. SCA want to ship the coal mine waste to their facility at Sunnyside.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The permit area is shown on several maps. Map 111.100a, SCA/Star Point Waste Fuel Permit Boundary Map, shows location of the permit area and gives a detailed legal description. The permit area is divided into two areas, the refuse pile and the topsoil stockpile area.

The acreage for each parcel within the permit area is given on Map 111.100a. The parcels are owned either by Sunnyside Cogeneration Associates or the BLM.

While all the information is listed on Map 111.100a and in Exhibit 114.100a, Right of Entry Authorization Documents, the information is not clearly shown in the text. The Division is often required to identify the permit and disturbed area boundaries, and coal and surface ownership acreages. To avoid confusion, the Permittee must show that information in the application in a clear and concise form. For example, the Permittee could place that information in a table.

Findings:

The information in the PAP is not considered adequate to meet the minimum requirements of the Permit Area regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-521, The Permittee must give the Division a summary table of the acreages in the permit and disturbed area. The acreages must be divided into Federal, and fee land. The Division frequently needs this information.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Affected Area Boundary Maps

The Division considers the affected area for the SCA/Star Point Waste Fuel Refuse Pile to be the same as the permit area. Note: the affected area includes sub-areas for which it is anticipated that additional permits will be sought. Given the nature of the project, recovery of refuse material, the Permittee will most likely not seek addition areas to mine.

Existing Structures and Facilities Maps

The existing structures are shown on Map 521.100a and Map 521.100b. Since those maps are operation maps the features could change. To insure that a list of existing structures is always available, the Applicant must list those items in the text or have a map dedicated to showing the existing features. Such a map could not be modified as the operations progress. What the Division wants is a snapshot of the facilities that existed when the permit was issued.

Existing Surface Configuration Maps

The term existing surface configuration is not defined. Because part of the proposed permit area was disturbed pre-SMCRA and some part post-SMCRA, the issue can become complicated. Maps that show the surface configuration before disturbance should be available from PMC. The permittee needs to supply such maps to the Division before mining and reclamation activities.

The Division would like contour maps of the pre-SMCRA disturbed areas before mining and reclamation activities. Such maps should be available from PMC. Such maps may not exist. If they do not, then the Division requests maps showing the contours of those areas, as they appeared when the SMCRA permit was issued. Aerial photography conducted in 1976 (Section 553.100) and the resource recovery investigation conducted in 2001 (Exhibit 624.210a) might provide the topographic information requested.

If the Applicant is unable to obtain maps of the existing, surface configuration from PMC, then the Applicant must state so. Then, Applicant must label a set of contour maps that show the existing topography as the “existing contour” maps.

Mine Workings Maps

There are no known underground or surface mines in the area. The only mining activity that has occurred in the area involves the refuse pile and topsoil storage area.

Permit Area Boundary Maps

Map 111.100a, SCA/Star Pont Waste Fuel Permit Boundary Survey, shows the permit boundaries. The map also shows the legal description.

Surface and Subsurface Manmade Features Maps

The locations of all buildings within 1,000 feet of the permit boundary are shown on Maps 521.100a and 521.100b. Most of the buildings out the permit area are schedule to be demolished as part of the Star Point mine reclamation.

The maps show the location of the County Road 290, which run parallel to the northern boundary of the refuse pile permit area.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-521.161, The Applicant must provide a map dedicated to showing the existing facilities, structures and utilities on site when the permit is issued.

R645-301-521.150, The Applicant must provide maps that show 1) the pre-disturbance surface configuration (topography) of the permit area where possible. 2) pre-SMCRA contour maps (topographic maps for the permit area before August 1977) and 3) current topography.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

The mining activities at the SCA/Star Point Waste Fuel Refuse Pile will consist of excavating and handling coal mine waste (refuse.) Approximately 100,000 to 300,000 tons per year of coal mine waste will be excavated by SCA from the permit area. SCA will use a standard mobile fleet of excavation equipment that may include all or some of the following: dozers, front-end loaders, end-dump trucks, scrapers, backhoes, and support equipment.

The Applicant proposes to use the existing structures and facilities, which were approved for use by PMC. Those structures and facilities are shown on Plate 521.100a, Plate 521.100b and in section 526 of the PAP.

Findings:

The information provided in the PAP meets the minimum requirements for the mining operations and facilities section of the regulations.

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

In section 526.111 of the PAP, the Applicant lists the following existing structures:

- Coal Waste Refuse Pile
- Vegetation/Soil Test Plots
- Sediment Pond No. 5
- Sediment Pond No. 6
- Accounting/Surface Operations Office
- Surface Operations Bathhouse
- Surface Foreman's Office, Salt Storage, Achieves
- Excess Spoil Disposal Area (Former Pond Treatment Area)
- Concrete Slab (Part of fuel storage/dispensing structures that have been removed.)
- Shop Building
- Sediment Pond No. 9

Exhibit 526.112a contains photographs of the existing structures. That information is adequate to document the structures that exist at the time of permit issuance and the condition that the structures are in.

Findings:

The information provided in the PAP meets the minimum requirements for the existing structures section of the regulations.

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

The Applicant does not plan to relocate or use any public roads that are within the permit boundary. However, SCA does plan to conduct mining operations with 100 feet of the right-of-way of a public road. Therefore, the Applicant needs to indicate how the public will be protected from mining and reclamation activities that occur within 100 feet of the public right-of-way.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-526.116, The Applicant will describe how the public will be protected from mining and reclamation activities that occur within 100 feet of the right of way of County Road 290.

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

The Applicant proposes to ship coal refuse from the site to a cogeneration facility. At the cogeneration facility, the Applicant will burn the coal refuse to generate electricity. Given the nature of the material and the locale markets the only foreseeable use of the refuse material is to burn the material in a cogeneration facility. The only other option is to bury the refuse material at the current location.

Findings:

The information provided in the PAP meets the minimum requirements for the coal recovery of the regulations.

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

The Applicant does not propose to conduct underground coal mining within the proposed permit boundaries. There are no known underground workings within the proposed permit boundaries. Since subsidence will not occur, the Applicant does not need to submit a subsidence control plan.

Findings:

The information provided in the PAP meets the minimum requirements for the subsidence control plan of the regulations.

SLIDES AND OTHER DAMAGE

Regulatory Reference: 30 CFR Sec. 817.99; R645-301-515.

Analysis:

The Applicant has committed to notify the Division if a slide was to occur and to comply with any remedial measures required by the Division. The Applicant did not specifically state that they would notify the Division by the fastest method available in the event of a slide. R645-301-515.100 requires that the Division be notified by the fastest available means.

The Applicant also qualifies how they will respond to remedial measures required by the Division. The Applicant qualifies the commitment by stating, "If those measures are considered to be sound and safe." The qualification could void any commitment to follow Division orders and needs to be modified.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-515.100, The Applicant will describe how they will report slides to the Division and include a commitment to notify the Division by the fastest means possible and to comply with any remedial measured required by the Division. The Applicant must also remove or modify the qualifications to follow the Division's orders involving slides.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

Road Classification System

All roads with the possible exception of pit roads must be classified as primary or ancillary roads, R645-301-527.100. The Division considers pit roads to be roads in the active mining section of the refuse pile. The location of pit roads will change as mining progresses. In general, the Division does not require pit roads to be designed.

In Section 527.100-200 of the PAP the Applicant stated that all roads would be classified as ancillary. The Division does not agree with that classification. By definition, a primary road is used frequently for access for a period of six months or more or is used to haul coal or spoil. Therefore, the access roads and haulage roads in the permit area must be considered primary. If the Applicant wants to classify a road as ancillary then they need to show that it will have limited use, such as a road to a monitoring station..

Plans and Drawings

The Applicant needs to include detailed designs and drawings for all primary and ancillary roads within the permit boundaries. Therefore, the Applicant needs to include designs for the roads they call temporary pit roads, which includes access roads to pond 5 and the catch basins. In addition, the Applicant must also include designs for the road to the topsoil stockpile area.

In section 527.210 of the PAP the Applicant describes the general designs for Road G (access to pond 6) and Road L (access to excess spoil disposal area and pond 9.) The roads were included in the Star Point MRP and approved by the Division. Road G is 10 to 12 feet wide and has a maximum grade of 15%. Road L is 15 to 25 feet wide and has a maximum grade of 7.3%.

None of the roads described by the Applicant are located in a natural drainage. The Applicant has committed to maintain all roads. The Division requires no special geotechnical analysis.

The Applicant did not address all of the requirements of R645-301-534. Since the Division as part of the Star Point MRP has approved the roads the information on road design should be available to the Applicant.

The Applicant did state that all private roads within the permit area would be reclaimed. The commitment is stated in section 542.200 of the PAP.

Performance Standards

The general performance standards are listed in R645-301-534.140, R645-301-534.150, R645-301-534.200 and R645-301-534.300. The Applicant needs to address those performance standards.

Primary Road Certification

Plate 534.100a and Plate 534.100b show the general designs for road L and road G. A registered professional engineer has certified the designs.

Other Transportation Facilities

The Applicant did stated that the only other not list any other transportation facilities within the permit boundaries is a rail line that is not under control of the Applicant.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-527.100, The Permittee needs to classify the main haul roads by the refuse pile and the road to the topsoil stockpile as primary.

R645-301-527, The Applicant must show the designs for all primary roads in the permit area including the topsoil stockpile access road and the main haul roads.

R645-301-534, The Applicant must provide designs for all roads including the haul roads and the topsoil access road and state how the design requirements of R645-301-534 will be met. The Division is specifically concerned with embankment stability and how off site impacts will be prevented.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Disposal Of Noncoal Mine Wastes

The Applicant committed to have dumpsters placed in a central location. Periodically the dumpsters will be emptied and the noncoal waste will be shipped to a state approved landfill. All hazardous wastes will be disposed of in accordance with RCRA.

Coal Mine Waste

Coal mine waste is defined as coal processing waste and underground development waste. SCA will reduce the amount of coal processing/underground development waste through its re-mining operation at the site.

Refuse Piles

There are three existing refuse piles at the site, A, B and C. The refuse piles are shown on several maps including Plate 521.100d and Plate 521.100e. Because of the nature of the project, no additional refuse will be placed on site. The mine plan calls for the refuse to be removed from the piles and sent to a cogeneration facility for burning.

The general requirements for refuse pile design are as follows:

- The refuse pile will be designed using current prudent engineering practices and will meet the design requirements of the Division. The Division has approved the design of the refuse piles as part of the Star Point MRP. Since the Applicant intents to remove material from the refuse piles instead of adding to them the Division will consider the design of the existing refuse piles adequate.
- The refuse piles must have a static safety factor of 1.5. The stability analysis for the refuse piles is in Exhibit 528.322a. The Applicant proposes to keep the slopes stable by maintaining a slope angle of 2H: 1V.
- No additional foundations will be constructed at that the site.

Coal mine waste must be disposed of in controlled manner as required by R645-301-536.200. R645-301-536.300 allows disposal of coal mine waste in excess spoil area, if approved by the Division. The Applicant states that some coal mine waste may be unsuitable for shipment to the cogeneration facility. The Applicant proposes to move the reject material to the excess spoil disposal site (settling ponds) for disposal.

The Division does consider sediment pond clean out material to be excess spoil. In general excess spoil means overburden that cannot be returned to the pit area due to swelling. Since the Applicant proposes to dispose of 140,000 cubic yard of reject material in the excess

spoil area, the Division considers this a major undertaking. The amount of sediment pond clean out material is minor compared to the amount of reject material. As a point of comparison, the amount of substitute topsoil is 240,000 cubic yards.

The Division's main concern about the disposal of coal mine waste in the excess spoil pile area is with reclamation. For example there are specific regulations requiring refuse material to be covered with 4 feet of material, while there are no requirements for depth of cover over excess spoil.

The Division wants the Applicant to dispose of the refuse reject material either in the existing refuse piles or to permit the sediment basins as refuse piles.

The refuse piles were designed and approved in the Star Point MRP.

Impounding Structures

The Applicant states in section 528.400 of the PAP that there are numerous sediment ponds and sediment traps in the area. The main purpose of this regulation is to regulate impoundments made out of coal mine waste, see R645-301-536.400. Therefore, the Applicant needs to state if any impoundments are made out of coal mine waste and if so then document that the Division approved the ponds construction.

Burning And Burned Waste Utilization

The Applicant will handle burning waste material by either removing it from the refuse pile and extinguishing it or by covering the burning material with inert material. The Applicant committed to using only employees trained in handling burning waste material for extinguishing the fires. This plan is similar to those approved by the Division and used by AML for dealing with coal waste fires.

Return of Coal Processing Waste to Abandoned Underground Workings

The Applicant does not propose to place coal processing waste in underground workings.

Excess Spoil

The application describes an excess spoil disposal area, which is shown on Plate 521.100a. The spoil will be placed in a controlled manner and then covered with four feet of material. In section 528.300-321 of the PAP, the Applicant also indicates states that coal mine waste (refuse) that is not suitable for combustion will be placed in the excess spoil disposal area.

The only material to be generated at the site fitting the definition of excess spoil is sediment pond cleanout material. In Sections 521.169 and 528.300-321 of the PAP, and throughout the application, the Applicant refers to reject refuse material as excess spoil. The Division does not consider refuse reject material as excess spoil. Spoil means overburden that has been removed during coal mining and reclamation operations. Reject refuse material does not meet the definition of spoil.

The Applicant states that the excess spoil disposal area is capable of handling 145,000 cubic yards of material. The amount of sediment pond clean out material will be minor compared to the amount of reject material. This method of disposal for refuse is not acceptable to the Division, because the excess spoil disposal area could become a refuse pile. Unless the Applicant can show a compelling reason why coal mine waste should be disposed of in the excess spoil pile site, Division will require disposal of all coal mine waste (refuse) in the existing refuse pile areas.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-536.400, The Applicant must state which if any sediment ponds (impoundments) are constructed from coal mine waste (refuse) material and give engineering designs for the construction in the Permit Application Package.

R645-100-200 and R645-301-121.200, The Applicant must classify all reject refuse material as coal mine waste not as spoil or excess spoil. The reject refuse material does not meet the definition of spoil.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Impoundments

The sediment ponds, Pond 5, Pond 6 and Pond 9 were all constructed or approved under the Star Point permit.

The designs of the sediment ponds address the following requirements:

- None of the ponds meet the requirements of an MSHA pond.
- A registered professional engineer designed all ponds.
- The Applicant did not address the stability of Pond 6 in Section 533.100-200 of the PAP and the Applicant did not state where the stability analysis for Pond 9 could be found. The Applicant did state that Pond 5 has a safety factor of 1.8 and Pond 9 has a safety factor of greater than 1.5.
- Since the ponds were approved in the Star Point permit the Division has already reviewed the ponds' construction, including foundation preparation.
- No highwalls are associated with the ponds.
- Inspections of the pond construction were handled under the Star Point permit.
- None of the ponds will be permanent, all ponds will be removed during final reclamation.

Ponds, Impoundments, Banks, Dams, and Embankments

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-533.110, The Applicant must address the stability requirements for Pond 6 and state in Section 533.100-200 of the PAP where the stability analysis for all ponds can be found.

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

Analysis:

In section 526 of the PAP the Applicant lists the existing and proposed support facilities and utility installations. In Table 526.111a of the PAP, the Applicant lists the following existing structures:

- Coal Waste Refuse Pile
- Vegetation/Soil Test Plots
- Sediment Pond No. 5
- Sediment Pond No. 6

- Accounting/Surface Operations Office
- Surface Operations Bathhouse
- Surface Foreman's Office, Salt Storage, Achieves
- Excess Spoil Disposal Area (Former Pond Treatment Area)
- Concrete Slab (Part of fuel storage/dispensing structures that have been removed.)
- Shop Building
- Sediment Pond No. 9

In Table 526.11b of the PAP the Applicant lists the following proposed structures.

- Bermed containment area for portable tank with concrete slab.
- Bermed containment area for portable tank.

The Applicant did not discuss utilities such a power and waterlines.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-526.200, The Applicant must state in the text and show on maps the location of utilities such as water and power lines.

SIGNS AND MARKERS

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

Analysis:

The Applicant committed in the MRP to post all signs and markers as required by R645-301-521.200. The following guidelines will be followed:

- The signs and markers will be posted, maintained and removed by SCA.
- The signs and markers will be built of durable material and conform to local laws and regulations.
- They will be in-place and maintained during all operation and reclamation activities
- They will be retained and maintained until after the release of all bonds.

Findings:

The information provided in the PAP meets the minimum requirements for the signs and markers section of the regulations.

USE OF EXPLOSIVES

Regulatory Reference: 30 CFR Sec. 817.61, 817.62, 817.64, 817.66, 817.67, 817.68; R645-301-524.

Analysis:

No blasting is anticipated at the site therefore, no blasting plan or pre-blasting survey is needed.

Findings:

The information provided in the PAP meets the minimum requirements for the use of explosives section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Affected Area Maps

The affected area should include the areas on which mining and reclamation activities will occur over the life of the mine. For the SCA/ Star Point Waste Fuel Refuse Pile those areas should in within the proposed permit boundaries. Several maps show the location of the permit boundaries including maps 521.100a, 521.100b and 521.100c. A professional engineer certified all the maps.

Mining Facilities Maps

The mining facilities are shown on several maps including maps 521.100a, 521.100b and 521.100c. A professional engineer certified all the maps.

Mine Workings Maps

Due to the nature of the project, detailed mine maps are not needed. Mining will consist of removing coal mine waste (refuse) from the refuse piles and shipping it to a cogeneration facility. What the Division is interested in is the configuration of the refuse piles before mining and the configuration after mine. The after mining configuration is shown on the reclamation maps, 542.200a and 542.200b. A professional engineer certified all the maps.

The Division does need a map that shows the timing and sequence of mining operations. None of the maps show that information. Specifically the Division needs a map that shows the sequence and timing for the each of the first five years and a general plan for each additional five year period.

Certification Requirements

All maps submitted by the Applicant that need certification have been certified.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-521.100, The Applicant must give the Division mine maps that show the timing and sequence of the mining operation. Specifically the Division is interested in a map that shows mining and reclamation activities for each of the first five years and then the operations or each of the remaining five year periods.

RECLAMATION PLAN

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

The term approximate original contour restoration means that the final surface configuration shall closely resemble the general surface configuration of the land before mining. The requirement does not mean that the post-mining and pre-mining configuration are the same. Rather, the term AOC means:

- The post-mining topography shall closely resemble the slopes of the surrounding area.
- Spoil piles will be eliminated
- Highwalls will be eliminated
- Drainage systems will complement those of the surrounding area.

Since mining will consist of removing coal mine waste (refuse) the mined area will be reclaimed to the near pre-disturbed contours. The post-mining contours will be similar to those of the surrounding area, a gently sloping topography.

No spoil piles or highwalls are associated with the permit area. The reclaimed drainage systems will be constructed so that it blends into the surrounding drainage systems.

There are two reclamation plans for the SCA/Star Point Waste Fuel Refuse Pile. The first is based on the assumption that all the refuse is removed and that the Applicant reclaims according to the approved plan. The second is that the Applicant is unable to remove the coal mine waste and must reclaim refuse at the site . The Division has reviewed the first reclamation scenerio and found that it meets the AOC requirements. The second scenerio is similar to the reclamation plan approved by the Division for the Star Point refuse pile, which is approved. In both cases the Applicant meets the minimum requirements for meeting AOC.

Findings:

The information provided meets the minimum Approximate Original Contour requirements of the Regulations.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

The general requirements for backfilling and grading are:

- The site meets the approximate original contour requirements.
- All highwalls, spoil piles and depressions are eliminated.
- All slopes have a safety factor of 1.3 or greater.
- The slopes minimize erosion and water pollution.
- The reclaimed area is compatible with the approved postmining landuse.

As stated in the AOC section of the TA the Applicant has shown that the reclaimed site will meet the minimum requirements for achieving AOC. No highwalls or spoil piles are on site and all depression will be eliminated.

The slopes will be gentle and blend into the surrounding areas. Such slopes will help minimize erosion and water pollution both on and off site. In addition the site will be compatible with the postmining landuse.

In addition, there are not settled and revegetated fill areas, or exposed coal seams. All coal mine waste will be covered.

Exposed coal seams, acid- and toxic-forming materials, and combustible materials exposed, used, or produced during mining shall be adequately covered with nontoxic and noncombustible materials, or treated, to control the impact on surface and ground water, to prevent sustained combustion, and to minimize adverse effects on plant growth and the approved postmining land use.

The Applicant does need to have a plan for the final disposal of coal mine waste (refuse) that will not be shipped off site. The Applicant's proposal to place reject material in the sediment basins along with sediment pond clean out material (excess spoil) is not acceptable to the Division. The main reason is that the reclamation requirements for excess spoil are not the same for refuse. The Division wants all refuse material to be covered with 4 feet of material and be disposed of in engineered site.

Previously Mined Areas

The provisions of the previously mined area allow for highwalls to be retained under limited conditions. Because there are no highwalls in the permit area, this provision does not apply.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-553, The Applicant must give the Division a backfilling and grading plan that shows how, when and where coal mine waste that is not suitable for shipment to the cogeneration facility will be disposed of. The proposed plan to dispose of the material in the sediment basins in not acceptable to the Division because the requirements for disposal of excess spoil are not as rigid as those of disposal of refuse materials.

MINE OPENINGS

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

Analysis:

There are no mine openings within the permit area.

Findings:

The information provided in the PAP meets the minimum requirements for the mine openings section of the regulations.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

Reclamation

The Applicant states that all private roads within the permit area will be reclaimed when no longer needed. The roads will be dirt, so disposal of surfacing materials should not be a problem. Reclamation of the roads will be done by pulling fill back up from the down-slopes and placing it in the cuts. The replaced fill material will be shaped to conform to the adjacent terrain and to meet the natural drainage pattern. Water bars and cross drains may be constructed across reclaimed roads to minimize erosion where necessary. Barriers of native rock or earthen berms to prevent vehicular access will block the entrances to reclaimed roads.

Map 542.200a shows the reclamation surface for the site under the worst case bonding scenerio all roads are removed. Map 542.200e shows the reclaimed site after full mining and all roads are removed.

Retention

No roads in the permit area are scheduled to be retained.

Findings:

The information provided in the PAP meets the minimum requirements for the road system section of the regulations.

CESSATION OF OPERATIONS

Regulatory Reference: 30 CFR Sec. 817.131, 817.132; R645-301-515, -301-541.

Analysis:

The Applicant commits in section 515.300 to follow the requirements of R645-301-515.300 in the event of temporary cessation. The general commitments are to notify the Division if temporary cessation will last more than 30 days and to secure the site.

In section 541 of the PAP, the Applicant commits to reclaim the site once mining activities have been completed.

Findings:

The information provided in the PAP meets the minimum requirements for the cessation of operations section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Bonded Area Map

The Division usually considers the bonded area to be the same as the disturbed area boundaries.

Reclamation Backfilling And Grading Maps

The project has two possible backfilling and grading plans. The worst case scenerio is base on the assumption that as soon as the permit is issued the site will go into permanent reclamation. In that case, the refuse pile would be covered with substitute topsoil. Plans for the

worst case scenerio are shown on Map 542.200a with cross section on 542.200b. The reclamation plans for the best case scenerio are shown Map 542.200e. The plans for the substitute soil area are shown on Map 542.200c and542.200d.

There is only one cross-section of the refuse pile for the worst-case scenerio and no cross-sections of the best-case scenerio. The Division needs to have cross-sections for the entire main mine facility at intervals of no less than 200 feet. The Division needs that information to verify that reclamation is going according to plan.

Reclamation Facilities Maps

No facilities at the site will exist after reclamation.

Final Surface Configuration Maps

The project has two possible final surface configurations. The worst case scenerio is base on the assumption that as soon as the permit is issued the site will go into permanent reclamation. In that case, the refuse pile would be covered with substitute topsoil. Plans for the worst case scenerio are shown on Map 542.200a with cross section on 542.200b. The reclamation plans for the best case scenerio are shown Map 542.200e. The plans for the substitute soil area are shown on Map 542.200c and542.200d.

Reclamation Surface And Subsurface Manmade Features Maps

No surface features are planned nor are any subsurface manmade features known for the site.

Reclamation Treatments Maps

No permanent reclamation treatment facilities are schedule for the site.

Certification Requirements.

Maps and cross sections were certified by a registered professional engineer, as required.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-542.300, The Applicant must give the Division detailed cross section for the worst case and best case scenario at the refuse pile area at a spacing of no less than 200 feet.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

Form of Bond

The Division will review the form of the bond after the Permittee has acquired the bond but before the permit has been issued.

Determination of Bond Amount

The Division reviewed the reclamation cost estimates for the Star Point refuse pile and while most of the information was submitted there were some deficiencies. The Division divides the reclamation cost estimate into three sections, demolition, earthwork and vegetation. The following is an outline of the reclamation cost estimate:

Demolition

There are five buildings associated with the refuse pile. The buildings are either masonry, mixed, or steel construction. The Permittee listed the buildings dimensions and type. The Permittee did not list the following:

- The floor thickness
- The footing dimensions
- Where the building debris will be disposed.

The concrete demolition costs listed in Means are for small jobs and usually exceed the cost of most contractors. The Division uses concrete demolition costs based on larger equipment. Therefore, the Division needs the dimensions of the floors and footers.

The Means demolition costs do not include debris disposal because the cost varies according to local markets. The Permittee needs to state where the debris will be sent for final disposal. Local disposal facilities include Nelsen construction, City Services and ECDC. The Division will allow steel to be shipped to a recycle facility with the assumption the no disposal fee will be charged. Means demolition costs include a transportation cost of 20 miles one way.

If the distance to the disposal facility exceeds 20 miles then additional transportation fees must be included.

Earthwork

The Permittee supplied the Division with summary sheets of the earthwork costs and productivity. To verify the amount the Division needs detailed worksheets that include cut and fill calculations. In the past cut and fill calculations included cross-sections and volume calculations. Since most Permittees choose to do volume calculation with a computer program the Division needs a map showing the cut and fill areas and where material will be sent. The Division also needs detailed productivity calculations for equipment productivity. Copies of those worksheets are in the OSM handbook on reclamation cost estimates. The Division will supply the Permittee with copies upon request.

The Permittee listed a 651E scrapper under equipment rental rates but did not show the use of a scrapper in the cost sheet.

Vegetation

The Permittee shows the vegetation cost as a lump sum. The Division does not base vegetation costs lump sums. The Division bases the vegetation costs on local seed prices and Means labor and equipment rates. The Division will assist the Permittee in determining vegetation cost estimates.

Terms and Conditions for Liability Insurance

The Division will review the liability insurance policy after the policy has been acquired but before the permit has been issued.

Findings:

The information provided in the PAP is not considered adequate to meet the minimum requirements of the regulations. Prior to approval, the Applicant must provide the following in accordance with:

R645-301-830.140, The Applicant must give the Division detailed reclamation cost estimates. In the analysis section of the bonding requirements the Division outlined the deficiencies in the bond calculations that were submitted by the Applicant. Note: Upon request, the Division will assist the Applicant with the bond calculations.

RECOMMENDATIONS:

The permit application should be denied until the deficiencies have been adequately addressed.

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